ABSTRACT

The specification discloses a robot for inspection adapted to travel virtually unlimited distances through small-diameter enclosed spaces such as conduits or ducts, preferably using a fluid-driven screw-drive propulsion system. The robot preferably includes a plurality of wheels inclined at an angle greater than zero degrees and less than ninety degrees to the longitudinal axis of the pipe, a plurality of wheels aligned parallel to the longitudinal axis of the pipe, and a power system for causing relative rotation of the sections bearing the pitched and non-pitched wheels. The robot may include internal fluid flow passages, notched wheels, multiple retractable wheels, and is configured so as to have an operating diameter less than six and preferably less than two inches.